# STELLA MORETTI

DATA SCIENTIST

## CONTACT

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# **SKILLS**

PROGRAMMING LANGUAGES: Python, SQL

MACHINE LEARNING ALGORITHMS: Linear regression,

logistic regression, decision tree classification,

random forest classification, gradient boosted models, clustering

 $\textbf{PYTHON\,LIBRARIES:}\ NumPy, Pandas, scikit-learn, Beautiful\,Soup,$ 

 $Scrapy, NLTK, Gensim\,word2vec, SciPy, StatsModels, Flask$ 

DATABASES: NoSQL, PostgreSQL

PLATFORMS: Amazon Web Services, Git, GitHub

DATA VISUALIZATION: matplotlib, Seaborn, D3.js

## DATA SCIENCE PROJECTS

## Predicting the Rental Income of an Airbnb Home

- Developed an interactive web application to enable Airbnb hosts to estimate the expected income from their listing.
- Used a combination of regression algorithms to estimate revenue based on dynamic pricing and predicted occupancy.

## Modelling the Language of TED Talks

- Extracted key topics from 2,500 TED talk transcripts using natural language processing techniques.
- Modelled the semantic trajectory of selected words over time by creating vector representations of TED speakers' vocabulary using Gensim word2vec.
- Deconstructed the underlying structure of popular TED talks by conducting time-based sentiment analyses.

## **Predictive Commerce with Instacart**

 Predicted repeat purchases of grocery items with 85% accuracy by training a scikit-learn random forest classifier on Instacart customers' shopping history.

## The Forkcast

Predicted album review scores published on the popular music website,
Pitchfork, by training a linear regression model on data scraped using
Beautiful Soup, Scrapy and the Spotify Web API.

## **EDUCATION**

#### Metis, New York

Data Science Bootcamp 2017

Metis is an accredited, immersive data science program with a 12-week curriculum covering statistics, machine learning, and data visualization.

## The University of Melbourne, Australia

B.Eng. Chemical Engineering 2007

B.S. Chemistry 2007

## **EMPLOYMENT**

#### Freelance

Data Analyst · Jan 2017 to Present

Google Analytics certified analyst supporting the e-commerce business of a leading distributor of high-quality gift and toy products.

- Analyzed digital platform metrics and provided detailed recommendations for improving customer acquisition and engagement.
- Developed insightful automated dashboards, reports and data visualisations to monitor and understand KPIs.
- Collaborated with external developers to optimise website design, SEO and usability, which resulted in 15% revenue growth and 30% conversion rate growth.
- Devised and implemented a digital marketing strategy to increase traffic and drive sales using Facebook Advertising and Google AdWords.
- Tracked and evaluated campaign performance to maximise digital marketing ROI.

#### ExxonMobil

Project Engineer (Safety, Health & Environment) · 2014 to 2016

Led the data collection, analysis and reporting activities prescribed by a multi-billion dollar financing agreement for the Papua New Guinea Liquefied Natural Gas Project.

- Established a process for acquiring safety, health and environmental data from internal functional groups and third-party contractors.
- Analyzed data and built visualizations to illustrate the project's performance against defined KPIs.
- Identified data collection gaps and collaborated with project functions to address compliance issues.

## Operations Technical Surveillance Engineer · 2012 to 2014

Principal process engineer for five offshore production facilities that are major suppliers to Australia's natural gas market.

- Conducted surveillance of real-time operational metrics to optimize gas production and quickly troubleshoot problems.
- Analyzed and modelled long-term operational data to identify, prioritize and execute 20+ technical process improvements that resulted in increased production, minimized downtime and reduced safety risks.
- Led a multi-disciplinary project team to develop a strategy for monitoring and managing risks related to facility erosion, resulting in a 40% increase in gas production on one facility.
- Prepared technical evaluations, cost estimates, project economics, risk assessments and execution planning documentation for capital and expense projects.
- Completed change management documentation for facility modifications, including updates to technical drawings, procedures and process models.
- Coordinated the 2013-14 ExxonMobil Summer Intern Program awarded Australia's #1 Intern Program 2013 by the Australian Association of Graduate Employers.

## Project Engineer (Environment and Regulatory) · 2008 to 2012

Primary advisor for 20+ oil and gas production facilities, driving process improvements to reduce environmental impact.

- Monitored air and water emissions data to ensure operational compliance with environmental regulations.
- Conducted spill trajectory modelling to assess and predict the environmental impact of oil spills.
- Evaluated environmental performance indicators to identify opportunities to improve resource efficiency.